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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,521	08/29/2001	Tony N. Kfoury	CS10289	7363

7590 02/02/2004  
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Intellectual Property Section  
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EXAMINER

CHIANG, JACK

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 02/02/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/94/521

Applicant(s)

T.N. Kfoury Et Al.

Examiner

J Chiang

Group Art Unit

2642

# 4

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE -3- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 7-05-01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-25 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-25 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2-5
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

**CLAIMS**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 10, 14-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Nuovo et al. (US 6593914).

Regarding claim 1, Nuovo shows:

sensing an orientation of an input area (56) relative to a housing (52) (col. 3, lines 45-50);

Configuring a display image orientation on a display (54, figs. 4-5) relative to the housing (52) as a function of the orientation of the input area (56) (col. 3, lines 60-63).

Regarding claim 7, Nuovo shows:

A housing (52);

An input area (56);

A display (54);

A sensor (col. 3, lines 45-50);

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A display system changing an orientation on a display (54, figs. 4-5) relative to the orientation of the input area as a function of the orientation of the input area (56) (col. 3, lines 45-63).

Regarding claim 7, Nuovo shows:

A physically rotatable keypad (56);

A display and display drivers (see 54, figs. 4-5);

A sensor (col. 3, lines 45-50);

A processor for receiving the sensor signal and in response thereto modifying the display drivers for forming the display image on the display (54, figs. 4-5) with an orientation that is a function of the orientation of the keypad (see 54, 56 in figs. 4-5) (col. 3, lines 45-63).

Regarding claim 24, Nuovo shows:

A housing (52);

A pivotal keypad (56) having at least first and second positions (see figs. 4-5);

A display (54) having a first display configuration when the keypad is in the first position (i.e. fig. 4);

The display (54) having a second display configuration when the keypad is in the second position (i.e. fig. 5).

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Regarding claims 2-6, 8, 10, 14-17, 19-23, 25, Nuovo shows:

The orientation of the input area (56) includes at least one of sensing the orientation through input through a dome sheet array (see fig. 3);

The physical rotation of the input area and the electron rotation of the display (figs. 4-5);

The sensing of the orientation of a keypad (56);

Remapping keys based on a look-up table relative to key sensors (col. 3, lines 45-52, 26-44);

Modifying image forming display drivers in response to sensing the orientation of the keypad (i.e. figs. 4-5);

The 90 or 180 degrees rotation (col. 2, lines 36-43);

The keys and its key housing (see 56), key sensors and its sensor housing (84 in fig. 3);

The key sensors are one of the resistive, capacitive and bubble switches (keymat 82);

The keypad and the display in the first and second positions (figs. 4-5).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nuovo in view of Wolf et al. (US 6349221).

Regarding claim 9, Nuovo shows the keypad (input area).

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Nuovo differs from the claimed invention in that it does not explicitly mention that the keypad is a touchscreen.

However, push-button type keypad and touchscreen type keypad are the most common types of keypads in electronic device. This is also shown by Wolf's keypad (5, col. 2, lines 22-27).

Hence, the basic concept here is to provide a rotatable keypad, this is taught by Nuovo. Therefore, it would have been obvious for one skilled in the art to use Nuovo as it is, or to use a touchscreen keypad in Nuovo with/without the teaching of Wolf, because these types of keypads are considered to be alternative to each other, whether the touchscreen or the push-button type is used, they should be considered as a variation of the Nuovo's device, as long as Nuovo's basic concept of providing a rotatable keypad is substantially unchanged (see also col. 2, lines 22-27 in Wolf).

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nuovo in view of Baldoni (US 4267409).

Regarding claims 11-12, Nuovo shows the keypad (56).

Nuovo differs from the claimed invention in that it does not explicitly show the details of the keypad, such as the keypad support includes projections, the keypad membrane includes notches, and the keypad disc includes tabs and slot.

However, Baldoni, in a keypad, teaches providing a keypad support includes projections (12, 15), a keypad membrane includes notches (22), and a keypad disc includes tabs and slots (14 for receiving 15).

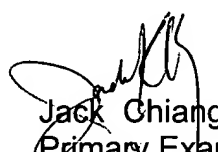
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Hence, the concept of providing a keypad is well taught by Nuovo, therefore, it would have been obvious for one skilled in the art to adapt the method of Baldoni in Nuovo when assembling a keypad, this simply can be considered as an intended use of Baldoni, or a variation of Nuovo, as long as the basic concept of providing a rotatable keypad is substantially the same.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Chiang whose telephone number is 703-305-4728. The examiner can normally be reached on Mon.-Fri. from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

  
Jack Chiang  
Primary Examiner  
Art Unit 2642